

John Amos Comenius (1592-1670) Maria Montessori (1870-1952) Parallels in Thought

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Founder and Program Director
Age of Montessori

Introduction: Mary Ellen Maunz



My best credentials as teacher



You!

- Where in the world are you from?
 - From Czech republic?
 - From US?
 - From other wonderful places?
- Teacher? Montessori Guide?
 - I-T
 - EC
 - EL
 - Adolescent
 - Admin

Thrilled to be in Prague





Beautiful Czech children





Maria Montessori mentions Comenius as one of the inspirations behind her work



My quest began in the 1970s UCLA Education Library

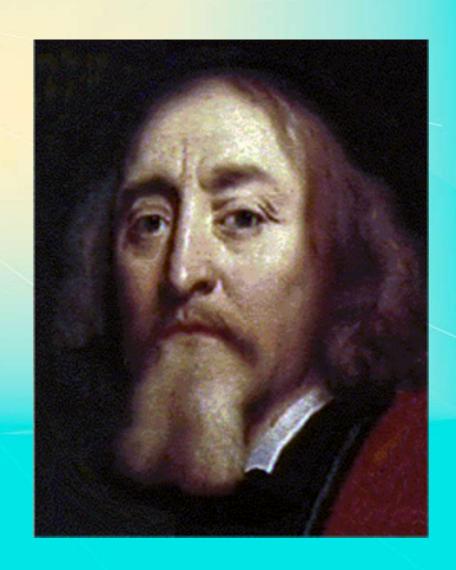


Our Journey today

- Explore basic similarities in their lives and in their thinking
- Similarities in essential ideas about education
- Comparison of 11 Principles from 'Nature is Our Guide' in Comenius' The Great Didactic to some of Maria Montessori's key ideas

Who was he?

- Born in what is now called the Czech
 Republic in 1592
- Moravian bishop and religious leader
- Zealous educational reformer
- Prolific author of international fame



Maria Montessori

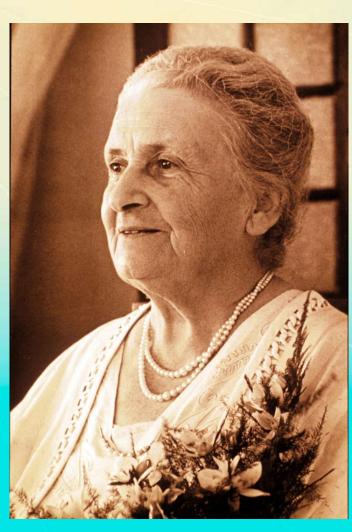
- Medical Doctor, Surgeon in Italy
- Private practice
- Teacher at two universities in Rome
- Chair of the Department of Anthropology at University of Rome
- Co-Director of Orthophrenic Center
- Teacher/founder of the Montessori Method
- Prolific lectures and author

Father of Modern Education Teacher of Nations

Instituting education for young girls as well as young boys, Comenius is often referred to as the Father of Modern Education.

In 1942, Czech President Masaryk gave him the title *Teacher of Nations*.

Mother of Humanity Recipient of international honors



Early experiences of Comenius

Orphaned at 12, Comenius was educated at the local Latin school, the kind of school he later called:

"The terror of boys and slaughter-houses of minds; places where a hatred of literature and books is contracted...

"Where ten or more years are spent in learning what might be acquire in one, where what ought to be poured in gently is violently forced in and beaten in."



Montessori's observations

"A principle of repression that amounts at time almost to slavery has a firm grip on both schools and education.

"The average intelligence of normal children is low compared to that of normalized children. Because their energies have been misdirected, they are like children with broken bones who have need of special care if they are to become physically fit again." Montessori referred to the old bolted down desks that held children down like butterflies in a collection, rather than as free spirits.



Living in times of war

Both were born into unstable times and got caught in the tumult of their times.

For political reasons Comenius was forced to flee from his home and settle in other nations.

So too, Maria Montessori was forced to flee her native Italy and later Spain and India, to find refuge in Holland.

Prolific thinkers, writers and mystics – grateful souls

Comenius, a voluminous writer, was a theologian and a mystic as well as an educator with a large vision.

Montessori too was a prolific writer, lecturer and mystic with a large vision.

Both always acknowledged their predecessors and those who inspired them.

Wide Interests

Montessori was a mathematician, biologist, anthropologist, medical doctor and educator. She thought and wrote about the best ways to teach religion.

Comenius, a religious leader and thinker, wrote on everything from education to physics and cosmology.

Montessori's Testament



Comenius' Magnum Opus

The **Great Didactic**of **John Amos Comenius**

Setting forth The Whole Art of Teaching all Things to all Men

OI

A certain Inducement to found such Schools in all the Parishes, Towns, and Villages of every Christian Kingdom, that the entire Youth of both Sexes, none being excepted, shall

Quickly, Pleasantly, & Thoroughly

Become learned in the Sciences, pure in Morals, trained to Piety, and in this manner instructed in all thing necessary for the present and for the future life, in which, with respect to everything that is suggested. Its Fundamental Principles are set forth from the essentia nature of the matter,

Its Truth is proved by examples from the several mechanical arts,

Its Order is clearly set forth in years, months, days, and hours, and, finally,

An Easy and Sure Method is shown, by which it can be pleasantly brought into existence.

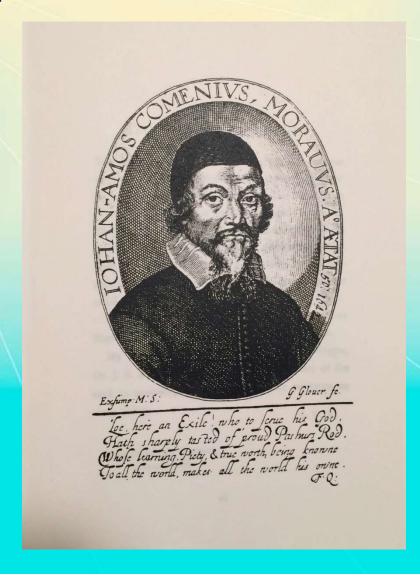
TRANSLATED INTO ENGLISH AND EDITED WITH BIOGRAPHICAL, HISTORICAL, AND CRITICAL INTRODUCTIONS BY

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ISBN 0-922802-80-7

1642 etching Frontispiece to *The Great Didactic*



Comenius' Pansophia

In his first book, *The Labyrinth of the World* and the Paradise of the Heart, Comenius details the search for inner peace.

Among his lost writings are those describing a universal wisdom that could bring peace and provide an expanded "cosmic" viewpoint for his students.

Montessori's Cosmic Plan: a vision of the whole universe

"Our aim therefore is not merely to make the child understand, and still less to force him to memorize, but so touch his imagination as to enthuse him to his inmost core."

A great educational secret

"The secret of good teaching is to regard the child's intelligence as a fertile field in which the seeds may be sown to grow under the heat of the flaming imagination." Montessori



"The duty of the teachers of the young, therefore, is none other than to skillfully scatter the seeds of instruction in their minds." Comenius



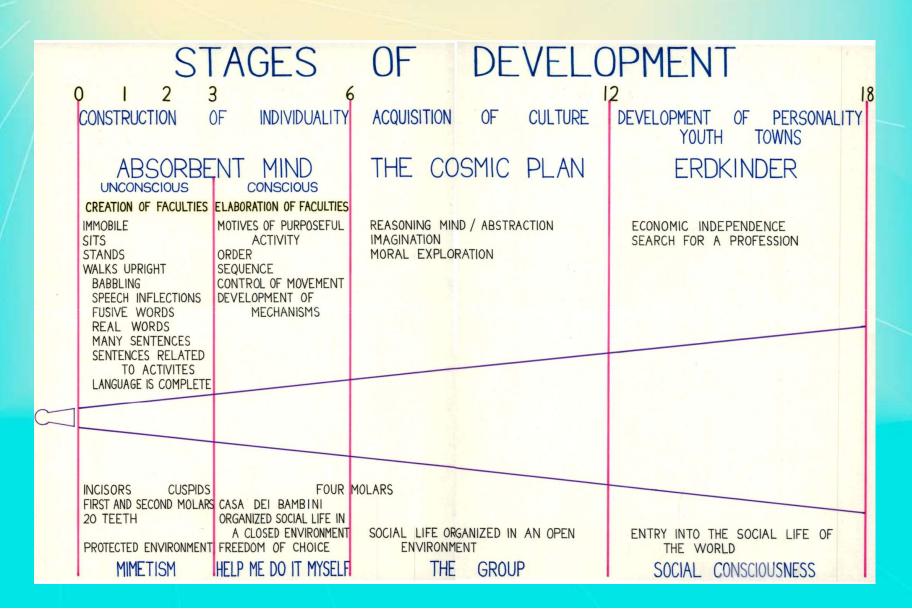
Honored by UNESCO as the guiding light in the fundamental ideas of developmental psychology



Nominated three times for the Nobel Peace Prize



Montessori's 1942 chart



Dr. Elisabeth Caspari, student and friend of Montessori, 1899 - 2002Shared chart from Adyar, India course 1941-42



The early years set patterns

Comenius was first to enunciate the great truth: no matter how good the schools are for older children, the early years count for building a

strong foundation.



Advocate of Mother Schools

Comenius was the first to suggest the role of mothers in educating their children in the first years of life. He wrote the first book specifically for mothers: *The Informatory of the Mother School.*

Montessori's *The Child in the Family,* among others of her books, carries on this tradition.

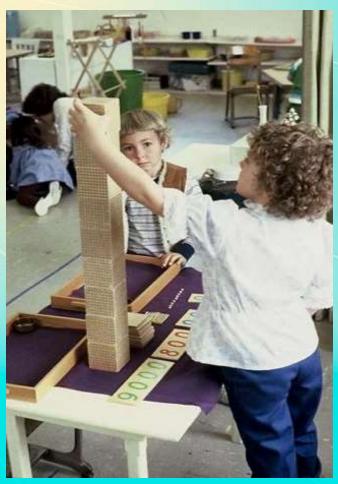
A Nod to the Senses

Comenius: "In a word, the eyes, the ears, the sense of touch, the mind itself, are in their search for food, ever carried beyond themselves..."

Montessori calls the child a "sensorial explorer," his senses enabling him to acquire clear, conscious, information and to be able to make classifications.

Children of the Promise





Underlying principles

- JAC: "Let us commence to seek out, in God's name, the principles on which, as an immovable rock, the method of teaching and learning can be grounded."
- MM: "God has given to the child a nature of his own and has fixed certain laws for his development, as much and as surely in the psychic realm as in that of the physical. Anyone who is responsible for the child's normal development should become acquainted with those laws...."

Education as the bane of the child's existence

JAC: "Teachers almost invariably take their pupils as they find them; they turn them, beat them, card them, comb them, drill them into certain forms, and expect them to become a finished and polished product; and if the result does not come up to their expectations (and I ask you how could it?) they are indignant, angry, and furious."

Education as the bane of the child's existence

MM: "There is a method by which the child may be brought to achieve the results which the adult has laid down as desirable. It is a very simple method. The child must be made to do whatever the adult wishes... to dominate the child, to bring him into subjection, to make him obedient – this is the basis of education."

Orbis Pictis: The Visible World in Pictures

(1)

Orbis Sensualium Pictus,

A World of Things Obvious to the Senses drawn in Pictures.

Invitation,

Invitatio.



The Master and the Boy.

Magister & Puer.

- P. What doth this mean,
- M. To understand right-

M. Come, Boy, learn to M. Veni, Puer, disce sa-

P. Quid hoc est, Sapere?

M. Intelligere recte,

| | (3) | |
|--------|--|-----|
| 1 | Cornix cornicatur, à à à The Crow crieth. | A a |
| See Se | Agnus balat, bèèèè The Lamb blaiteth. | Вь |
| 高 | Cicàda stridet, cì cì The Grasshopper chirpeth. | Сс |
| | Upupa dicit, du du The Whooppoo saith. | D d |
| | Infans ejulat, è è è è The Infant crieth. | Ее |
| | Ventus flat, fi fi The Wind bloweth. | F f |
| | Anser gingrit, ga ga The Goose gagleth. | Gg |
| Waris. | Os halat, hà'h hà'h The <i>Mouth</i> breatheth out. | Hh |
| | Mus mintrit, 1111 The Mouse chirpeth. | I i |
| | Anas tetrinnit, kha, kha The Duck quaketh. | Kk |
| 0-7 | Lupus ululat, lu ulu The Wolf howleth. [mum | L |
| JER L | Ursus murmurat, mum- The Bear grumbleth. | M |

400 Years Apart

The parallels between the thinking of Comenius and Montessori are deep and fascinating,

But, let us keep in mind:

They lived in vastly different times and had goals that were in some ways similar, in other ways very different.

Montessori's absorbent mind



Montessori

"Supposing I said there was a planet without schools or teachers, study was unknown, and yet the inhabitants—doing nothing but living and walking about—came to know all things, to carry in their minds the whole of learning... "Well, just this is a reality. It is the child's way of learning. This is the path he follows. He learns everything without knowing he is learning it, and in doing so passes little by little from the unconscious to the conscious, treading always in the paths of joy and love."

Comenius

"It is the nature of everything that comes into being, that while tender it is easily bent and formed, but that, when it has grown hard it is not easy to alter....

"It is evident that this holds good with man himself. His brain, which we compare to wax, because it receives the images of external objects that present themselves to its organs of sense, is in the years of childhood, quite wet and soft, and fit for receiving all images that come to it."

11 principles of Comenius from "Nature is our Guide" in *The Great Didactic*

Compared to key concepts of Montessori's writings

Comenius offers three parts to each principle

- 1. The principle
- 2. Violations
- 3. Rectifications

1st Principle – In all the operations of nature, development is from within

Montessori's entire system is based on internal development and the inner teacher.

My book: Nurturing Your Child's Inner Life



Montessori on uniqueness

"There is in man a special attitude to external things, which forms part of his nature, and determines its character....

"Our attention is not arrested by all things indifferently, but by those which are congenial to our tastes. The things which are useful to our inner life are those which arouse our interest...

"The painter will see a preponderance of colors in the world; the musician will be attracted by sounds. It is the quality of our attention which reveals ourselves, and we manifest ourselves externally by our aptitudes..."



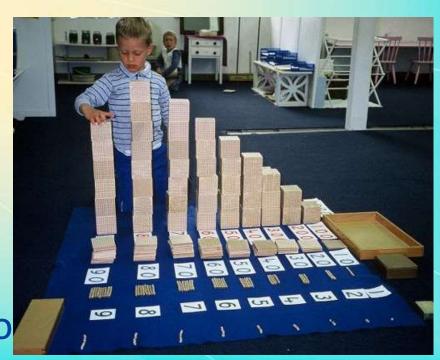


The deviation: endless lectures requiring students to learn the material by heart, and where students are fatigued without ever understanding the essentials.

Montessori tells us that true education is not tiring but vivifying. And, she quotes Dante: "Let thy words be few."

To rectify this problem:

- Pupils first need to understand things
- Then to remember them.
- No written or oral evaluations may be done until the first two steps are complete.



Rectification: Three-period lesson

This is rough – this is smooth (understand)

Show me rough...(remember)

What is this? (evaluate)



2nd Principle – Nature, in its formative process, begins with the universal and ends with the particular

Deviation: "It is a mistake to teach the several branches of science in detail before a general outline of the whole realm of knowledge has been placed before the students."

Rectification

Comenius suggests that at the very beginning of their studies, boys should receive instruction in the first principles of general culture.

Principle of Montessori's cosmic plan: Give the vision of the whole before specifics.



3rd Principle: Nature carefully avoids obstacles and things likely to cause hurt

Look at a mother bird; who lays her eggs and protects them from cold winds and rain as she drives away predators.



Deviation: The folly of introducing subject matter too confusing to young minds.

Comenius advises that only material appropriate for the classes be introduced. (Origin of Developmentally Appropriate Practice!)

Traditional reading instruction confuses many children



Montessori's rectification: isolation of difficulties

Example of Montessori language

- Control of movement
- Trace metal insets
- Beginning sounds and twin skills of segmentation and blending
- Letter mastery
- Word building with the movable alphabet
- Write
- Read

Avoiding obstacles



Everything we do for the child that he can do for himself, is an obstacle to his development.



Protecting the spiritual embryo

Montessori likened the problems in education to our ignorance of the secrets of mental and spiritual hygiene.

What will true understanding of the spiritual needs of children bring to us?

4th Principle – Nature begins by a careful selection of materials

Comenius's concern is for purity and clarity.

2 facets:

- Environment
- Teacher

Prepared environments









Spiritual preparation of the teacher

"The real preparation for education is the study of one's self.

The training of the teacher who is to help life is far more than the learning of ideas.



It includes the training of character; it is the preparation of the spirit."

5th Principle: - Nature prepares its material so that it actually strives to attain the form

"Thus the chicken in the egg, when sufficiently formed, seeks to develop itself still further, moves and bursts the shell or breaks through it with its beak. After escaping from its prison, it takes pleasure in the warmth and nutriment provided by its mother, opens its beak expectantly and swallows its food greedily. It rejoices to find itself under the open sky, exercises its wings, and later on, uses them with enjoyment."

"Almost at a point of crystallization, around which, provided there be homogeneous material and an undisturbed environment, the definitive form composes itself."



Comenius' deviation: "Those who drive boys to their studies, do them great harm."

He makes the point that when individuals are forced to eat when they are not hungry, sickness may follow.

When the person is hungry, food is readily digested and the nutrition assimilated.



Montessori's analogy: a thirsty man

"To quench thirst, it is not sufficient to see or to sip water; the thirsty man must drink his fill: that is to say, he must take in the quantity his organism requires....

"To satisfy this kind of psychical hunger and thirst, it is not sufficient to see things cursorily, much less to 'hear them described;' it is necessary to possess them and to use them to the full for the satisfaction of the needs of the inner life.

"This fact stands revealed as the basis of all psychical construction, and the sole secret of education. The external object is the gymnasium on which the spirit exercises itself, and such "internal" exercises are primarily in themselves the aim of action."

"Hence, the solid insets are not intended to give the child a knowledge of dimensions, nor are the plane insets designed to give him a conception of form; the purpose of these, as of all the other objects, is to make the child exercise his activities."





We do not ever have to "make" children learn

Learning is to the brain

as

Breathing is to the lungs

as

Beating is to the heart

6th Principle – Nature develops everything from beginnings, which, though insignificant in appearance, possess great potential strength

Montessori could not have said it better.

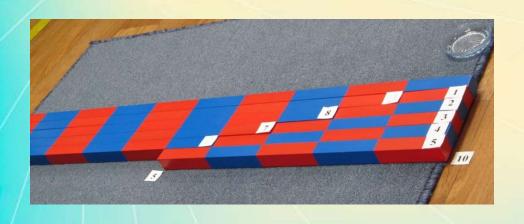
The child, who appears so weak and fragile, is actually the powerhouse of life, filled with potential that can either be fulfilled or repressed.

The deviation: "Most teachers are at pains to place in the earth plants instead of seeds, and trees instead of shoots..."

Rectifications:

- Every art must be contained in the shortest and most practical rules.
- Each rule must be expressed in the shortest and clearest words.
- Each rule must be accompanied by many examples.

Many examples for addition

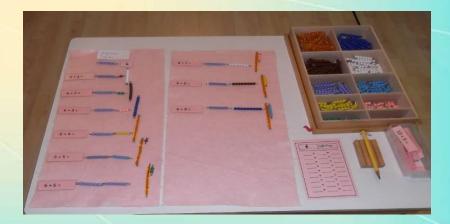






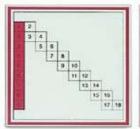






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In one of her training lectures in June of 1931, Montessori told her students:

"What needs to be known is the little we need to teach.



However it must be taught it an absolutely exact manner, especially when a conventional rule has already been established."

Comenius and the acorn

"Every organism develops according to a preordained pattern. Take, for example, the oak tree. It grows from an acorn. No other tree will grow from an acorn.

"Development takes place at the expense of matter taken in from the environment by a selective process within the organism.

"The external matter taken in is assimilated by digestion in such a way that it actually becomes part of the organism."

Montessori and "mental chemistry"

The absorbent mind works "at the expense" of the environment.



7th Principle – Nature advances from what is easy to what is more difficult

Comenius' example: the formation of the shell begins with the soft, internal parts rather than the shard exterior shell.

He says that therefore, "It is wrong to teach the unknown through the medium of that which is equally unknown."

The seed of the study of multiples



The prepared environment reflects sequences in materials











Montessori: From the concrete known to the abstract

"Very interesting again is the detachment the child shows at a certain point from aids to arithmetical calculation;

At a certain age of maturity he desired to "reason in the abstract" and make "abstract calculations with numbers" as if obeying an internal impulse which seeks to liberate the soul from every material bond and at the same time to effect an economy of time."



Continuum from easy to hard is guided by the inner teacher

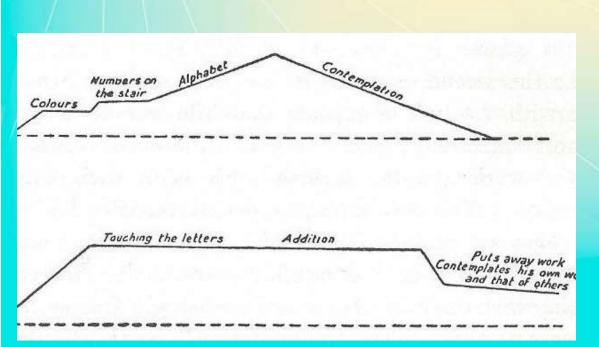
The vital point: the inner teacher of the child determines when to launch into the abstract, not an external assignment from a teacher.

8th Principle – Nature does not hurry, but advances slowly

The mother bird does not take her eggs into a fire to heat them up so they hatch faster, but rather she allows them to mature slowly under the warmth of her body.

Deviation: "For the young, it is torture if they are compelled to receive six, seven or eight hours class instruction daily and private lessons in addition."

Time for repetition and contemplation





9th Principle – Nature compels nothing to advance that is not driven forward by its own mature strength

"The chick is not compelled to leave the egg before its organs and limbs are ready to support him...

Likewise it is not forced to fly until its feathers have grown, nor is it or thrown out from the nest until ready."

Rectification

JAC: "Nothing should be taught to the young unless it is not only permitted but actually demanded by their age and mental strength."

MM: "The important thing for us to realize is that we are helping a child who has a principle within him. There exists in fact in the child an inner creative force, which is much stronger than we usually realize. Our aim therefore should be to help him to help himself."

10th Principle – Nature assists its operations in every possible manner

Deviation: cruelty of a teacher who expects a child to succeed at a task without first showing it and then after the child has toiled unsuccessfully, to lose his temper.

Comenius asks: "What is this but to torture the young? It is just as if a nurse were to force a child to walk while it is still afraid to stand on its legs, and beat it when it fails to do so."

Every child can learn

Comenius: "If it be urged that some men have such weak intellects that it is not possible for them to acquire knowledge, I answer that it is scarcely possible to find a mirror so dulled that it will not reflect images of some kid, or for a tablet to have such a rough surface that nothing can be inscribed on it."

Montessori
teaches us to
see the child
who is not yet
there



Path of learning







Nature assists us to redefine education

Montessori wrote that education is help to life.

It is not a specific curriculum that each child must pass through at exactly the same time.



11th Principle – Nothing is produced by nature of which the practical application is not soon evident

In a bird, the wings are for flying and the legs are for running. Comenius says that our task will be made easier if the child sees practical applications of what he

is learning.



Practical lesson extensions

Matching color tablets to something in the

environment.



Alexander Luria, colleague of Lev Vygotsky and the power of naming words



Montessori brings Comenius' principles into focus

"Those working in education, whom have managed to arouse interest that leads to action performed with all one's effort and effective enthusiasm, have succeeded in waking the man....

"Now man, with his interest aroused, often demonstrates unexpected energy. In the same way the child, when making an effort out of interest, displays abilities that were latent and unknown."



Two great educators

Both believed that education is the birthright of every child.

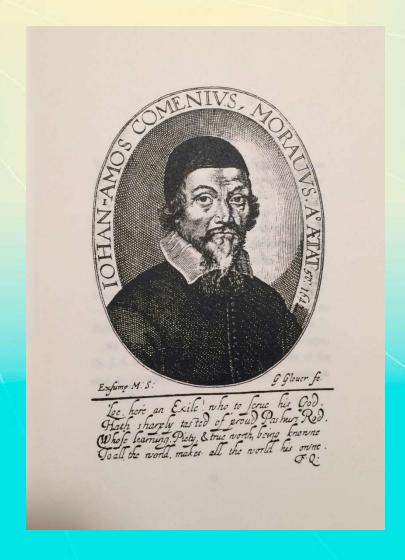
Both understood that our guide is nature, and that the great power of life resides within the child.

"If we consider the child as the cornerstone of education, and if guidance lies in the choice made by the child, rather than the teacher's logic, brand new principles are necessarily brought to education."

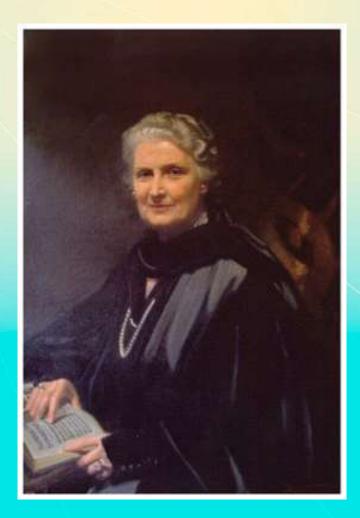
Maria Montessori



John Amos Comenius man with a grand vision



Maria Montessori woman with a grand vision and the means to implement it





It has been my honor to be here with you!